02/20/2024	Kit Components
Product code	Description
TRF1322C	LANCE Ultra hFrataxin Detection Kit
Components:	
FP1590EU500	Eu-anti-hFrataxin
FP1591UL500	UL-anti-hFrataxin
TRF1322S	hFrataxin Analyte lyophilyzed
TRF1011	Ultra HiBlock Buffer 5X, 2mL

# revvity

# Safety Data Sheet acc. to OSHA HCS

Printing date 02/20/2024

Reviewed on 05/18/2023

# **1** Identification

- · Product identifier
- · Trade name: Eu-anti-hFrataxin
- · Product number: FP1590EU500, FP1590EU10K
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Revvity, Inc 549 Albany Street Boston, MA 02118
- Information department: US Technical Support 800-762-4000
- *Emergency telephone number:* If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

# 2 Hazard(s) identification

- · Classification of the substance or mixture
- The product has been classified and is not hazadous according to the Globally Harmonized System (GHS).
- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0 Reactivity = 0

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

## 4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: If skin irritation continues, consult a doctor.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 2)

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Eu-anti-hFrataxin

• *Indication of any immediate medical attention and special treatment needed No further relevant information available.* 

#### 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

- · Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals

· PAC-1:		
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	12 mg/m <sup>3</sup>
26628-22-8	sodium azide	$0.026 \text{ mg/m}^3$
• PAC-2:		
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	130 mg/m <sup>3</sup>
26628-22-8	sodium azide	$0.29 \ mg/m^3$
· PAC-3:		
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	790 mg/m <sup>3</sup>
26628-22-8	sodium azide	$5.3 mg/m^3$

# 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Storage class: 12
- Specific end use(s) No further relevant information available.

(Contd. on page 3)

(Contd. of page 1)

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Eu-anti-hFrataxin

(Contd. of page 2)

#### 8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Exposure controls
- · Personal protective equipment:
- *General protective and hygienic measures:* The usual precautionary measures for handling chemicals should be followed.
- **Respiratory protection:** Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

Information on basic physical and c General Information	hemical properties	
Appearance:		
Form:	Fluid	
Color:	According to product specification	
Odor:	Characteristic	
Odor threshold:	Not determined.	
pH-value:	N/A	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Eu-anti-hFrataxin

		(Contd. of page
· Density at 20 °C (68 °F):	1 g/cm <sup>3</sup> (8.345 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/w	vater): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Water:	98.4 %	
VOC content:	0.00 %	
Solids content:	1.5 %	
· Other information	No further relevant information available.	

# 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- *Incompatible materials:* No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

(Contd. on page 5)

US

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Eu-anti-hFrataxin

(Contd. of page 4)

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

- · Toxicity
- *Aquatic toxicity:* No further relevant information available.
- *Persistence and degradability No further relevant information available.*
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- Ecotoxical effects: N/A
- Other information: N/A
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

# 13 Disposal considerations

- · Waste treatment methods
- *Recommendation:* Smaller quantities can be disposed of with household waste. Must be specially treated adhering to official regulations.
- Uncleaned packagings:
- *Recommendation: Disposal must be made according to official regulations.*

· UN-Number		
ADR, ADN, IMDG, IATA	not regulated	
· UN proper shipping name · ADR, ADN, IMDG, IATA	not regulated	
· Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
· Class	not regulated	
· Packing group		
· ADR, IMDG, IATA	not regulated	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
· Transport in bulk according to Anne.	x II of	
MARPOL73/78 and the IBC Code	Not applicable.	

(Contd. on page 6)

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Eu-anti-hFrataxin

(Contd. of page 5)

Sara	
Section 355 (extremely hazardous substances):	
26628-22-8 sodium azide	
Section 313 (Specific toxic chemical listings):	
26628-22-8 sodium azide	
TSCA (Toxic Substances Control Act):	
7732-18-5 Water	ACTIVE
7647-14-5 sodium chloride	ACTIVE
1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	ACTIVE
9048-46-8 Bovine Serum Albumin	ACTIVE
26628-22-8 sodium azide	ACTIVE
Hazardous Air Pollutants	
None of the ingredients is listed.	
Proposition 65	
Chemicals known to cause cancer:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
Carcinogenic categories	
EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
TLV (Threshold Limit Value)	
26628-22-8 sodium azide	A4
20028-22-8 Solium azide	

# 16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

· Contact:

• Date of preparation / last revision 02/20/2024

(Contd. on page 7)

<sup>-</sup> US -

Printing date 02/20/2024

Reviewed on 05/18/2023

## Trade name: Eu-anti-hFrataxin

(Contd. of page 6)	
· Abbreviations and acronyms:	
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International	
Carriage of Dangerous Goods by Road)	
IMDG: International Maritime Code for Dangerous Goods	
DOT: US Department of Transportation	
IATA: International Air Transport Association	
EINECS: European Inventory of Existing Commercial Chemical Substances	
ELINCS: European List of Notified Chemical Substances	
CAS: Chemical Abstracts Service (division of the American Chemical Society)	
NFPA: National Fire Protection Association (USA)	
VOC: Volatile Organic Compounds (USA, EU)	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
NIOSH: National Institute for Occupational Safety	
OSHA: Occupational Safety & Health	
TLV: Threshold Limit Value	
PEL: Permissible Exposure Limit	
REL: Recommended Exposure Limit	

# revvity

# Safety Data Sheet acc. to OSHA HCS

Printing date 02/20/2024

Reviewed on 05/18/2023

## **1** Identification

- · Product identifier
- · Trade name: UL-anti-hFrataxin
- · Product number: FP1591UL500, FP1591UL10K
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Revvity, Inc 549 Albany Street Boston, MA 02118
- Information department: US Technical Support 800-762-4000
- *Emergency telephone number:* If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

# 2 Hazard(s) identification

- · Classification of the substance or mixture
- The product has been classified and is not hazadous according to the Globally Harmonized System (GHS).
- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0 Reactivity = 0

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

## 4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: If skin irritation continues, consult a doctor.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 2)

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: UL-anti-hFrataxin

• *Indication of any immediate medical attention and special treatment needed No further relevant information available.* 

#### 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

- · Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals

• PAC-1:		
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	12 mg/m <sup>3</sup>
26628-22-8	sodium azide	$0.026 \text{ mg/m}^3$
• PAC-2:		
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	130 mg/m <sup>3</sup>
26628-22-8	sodium azide	$0.29 mg/m^3$
• PAC-3:		
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	790 mg/m <sup>3</sup>
26628-22-8	sodium azide	$5.3 mg/m^3$

# 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Storage class: 12
- Specific end use(s) No further relevant information available.

(Contd. on page 3)

(Contd. of page 1)

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: UL-anti-hFrataxin

(Contd. of page 2)

#### 8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Exposure controls
- · Personal protective equipment:
- *General protective and hygienic measures:* The usual precautionary measures for handling chemicals should be followed.
- **Respiratory protection:** Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

Information on basic physical and c General Information	hemical properties	
Appearance:		
Form:	Fluid	
Color:	According to product specification	
Odor:	Characteristic	
Odor threshold:	Not determined.	
pH-value:	N/A	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: UL-anti-hFrataxin

		(Contd. of page
• Density at 20 °C (68 °F):	1 g/cm <sup>3</sup> (8.345 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/w	ater): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Water:	98.4 %	
VOC content:	0.00 %	
Solids content:	1.5 %	
• Other information	No further relevant information available.	

# 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- *Incompatible materials:* No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

(Contd. on page 5)

US

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: UL-anti-hFrataxin

(Contd. of page 4)

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- *Persistence and degradability No further relevant information available.*
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- Ecotoxical effects: N/A
- Other information: N/A
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

# 13 Disposal considerations

- · Waste treatment methods
- *Recommendation:* Smaller quantities can be disposed of with household waste. Must be specially treated adhering to official regulations.
- Uncleaned packagings:
- *Recommendation: Disposal must be made according to official regulations.*

· UN-Number		
ADR, ADN, IMDG, IATA	not regulated	
· UN proper shipping name · ADR, ADN, IMDG, IATA	not regulated	
· Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
· Class	not regulated	
· Packing group		
· ADR, IMDG, IATA	not regulated	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
· Transport in bulk according to Anne.	x II of	
MARPOL73/78 and the IBC Code	Not applicable.	

(Contd. on page 6)

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: UL-anti-hFrataxin

(Contd. of page 5)

ction 355 (extremely hazardous substances):         628-22-8       sodium azide         ction 313 (Specific toxic chemical listings):         628-22-8       sodium azide         CA (Toxic Substances Control Act):         732-18-5       Water         647-14-5       sodium chloride         185-53-1       2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride         048-46-8       Bovine Serum Albumin         628-22-8       sodium azide         vardous Air Pollutants       ne of the ingredients is listed.         opposition 65       emicals known to cause cancer:         ne of the ingredients is listed.       eningredients is listed.	ACTIVI ACTIVI ACTIVI ACTIVI ACTIVI
ction 313 (Specific toxic chemical listings):         628-22-8       sodium azide         CA (Toxic Substances Control Act):         732-18-5       Water         647-14-5       sodium chloride         185-53-1       2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride         048-46-8       Bovine Serum Albumin         628-22-8       sodium azide         uzardous Air Pollutants       ne of the ingredients is listed.         oposition 65       emicals known to cause cancer:	ACTIVI ACTIVI ACTIVI
628-22-8       sodium azide <b>CA (Toxic Substances Control Act):</b> 732-18-5       Water         647-14-5       sodium chloride         185-53-1       2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride         048-46-8       Bovine Serum Albumin         628-22-8       sodium azide <b>uzardous Air Pollutants</b> ne of the ingredients is listed. <b>oposition 65 emicals known to cause cancer:</b>	ACTIVI ACTIVI ACTIVI
CA (Toxic Substances Control Act):         732-18-5       Water         647-14-5       sodium chloride         185-53-1       2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride         048-46-8       Bovine Serum Albumin         628-22-8       sodium azide         vzardous Air Pollutants       ne of the ingredients is listed.         oposition 65       emicals known to cause cancer:	ACTIVI ACTIVI ACTIVI
732-18-5       Water         647-14-5       sodium chloride         185-53-1       2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride         048-46-8       Bovine Serum Albumin         628-22-8       sodium azide         vzardous Air Pollutants       ne of the ingredients is listed.         oposition 65       emicals known to cause cancer:	ACTIVI ACTIVI ACTIVI
647-14-5       sodium chloride         185-53-1       2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride         048-46-8       Bovine Serum Albumin         628-22-8       sodium azide         vzardous Air Pollutants       ne of the ingredients is listed.         oposition 65       emicals known to cause cancer:	ACTIVI ACTIVI ACTIVI
185-53-1       2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride         048-46-8       Bovine Serum Albumin         628-22-8       sodium azide         tzardous Air Pollutants         ne of the ingredients is listed.         oposition 65         emicals known to cause cancer:	ACTIVI ACTIVI
048-46-8       Bovine Serum Albumin         628-22-8       sodium azide         uzardous Air Pollutants         ne of the ingredients is listed.         oposition 65         emicals known to cause cancer:	ACTIVI
628-22-8       sodium azide         tzardous Air Pollutants         ne of the ingredients is listed.         oposition 65         emicals known to cause cancer:	
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ne of the ingredients is listed. oposition 65 emicals known to cause cancer:	
oposition 65 emicals known to cause cancer:	
emicals known to cause cancer:	
na of the ingradiants is listed	
ne of the ingreatents is tisted.	
emicals known to cause reproductive toxicity for females:	
ne of the ingredients is listed.	
emicals known to cause reproductive toxicity for males:	
ne of the ingredients is listed.	
emicals known to cause developmental toxicity:	
ne of the ingredients is listed.	
rcinogenic categories	
PA (Environmental Protection Agency)	
ne of the ingredients is listed.	
V (Threshold Limit Value)	
628-22-8 sodium azide	

# 16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

· Contact:

• Date of preparation / last revision 02/20/2024

(Contd. on page 7)

<sup>-</sup> US -

Printing date 02/20/2024

Reviewed on 05/18/2023

#### Trade name: UL-anti-hFrataxin

(Contd. of page 6)	
Abbreviations and acronyms:	
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International	
Carriage of Dangerous Goods by Road)	
IMDG: International Maritime Code for Dangerous Goods	
DOT: US Department of Transportation	
IATA: International Air Transport Association	
EINECS: European Inventory of Existing Commercial Chemical Substances	
ELINCS: European List of Notified Chemical Substances	
CAS: Chemical Abstracts Service (division of the American Chemical Society)	
NFPA: National Fire Protection Association (USA)	
VOC: Volatile Organic Compounds (USA, EU)	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
NIOSH: National Institute for Occupational Safety	
OSHA: Occupational Safety & Health	
TLV: Threshold Limit Value	
PEL: Permissible Exposure Limit	
REL: Recommended Exposure Limit	
-	c

# revvity

# Safety Data Sheet acc. to OSHA HCS

Printing date 02/20/2024

Reviewed on 05/18/2023

# **1** Identification

- · Product identifier
- · Trade name: <u>hFrataxin Analyte lyophilyzed</u>
- **Product number:** TRF1322S
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Revvity, Inc 549 Albany Street Boston, MA 02118

- Information department: US Technical Support 800-762-4000
- Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

# 2 Hazard(s) identification

#### · Classification of the substance or mixture

Acute Toxicity - Inhalation 3	H331 Toxic if inhaled.
Skin Corrosion 1C	H314 Causes severe skin burns and eye damage.
Eye Damage 1	H318 Causes serious eye damage.
Sensitization - Skin 1	H317 May cause an allergic skin reaction.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.
• Additional information: For	the wording of the listed H phrases refer to section 16.

#### · Label elements

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



· Signal word Danger

• Hazard-determining components of labeling: Proclin-300

• Hazard statements

Toxic if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Very toxic to aquatic life with long lasting effects.

· Precautionary statements

Do not breathe dusts or mists.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

(Contd. on page 2)

<sup>—</sup>US

Printing date 02/20/2024

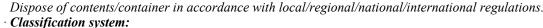
Reviewed on 05/18/2023

#### Trade name: hFrataxin Analyte lyophilyzed

(Contd. of page 1)

2.5-10%

<1%



· NFPA ratings (scale 0 - 4)

 $\begin{array}{c} \textbf{Health} = 3\\ \textbf{Fire} = 0\\ \textbf{Reactivity} = 0 \end{array}$ 

#### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

#### · Dangerous components:

1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride

55965-84-9 Proclin-300

#### 4 First-aid measures

#### · Description of first aid measures

- General information:
- Immediately remove any clothing soiled by the product.
- Remove breathing apparatus only after contaminated clothing have been completely removed.
- In case of irregular breathing or respiratory arrest provide artificial respiration.
- After inhalation:

Supply fresh air or oxygen; call for doctor.

- In case of unconsciousness place patient stably in side position for transportation.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.

• Information for doctor:

- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

# 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.

• Special hazards arising from the substance or mixture

- During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Wear protective equipment. Keep unprotected persons away.
- *Environmental precautions:* Do not allow product to reach sewage system or any water course.

(Contd. on page 3)

US

Printing date 02/20/2024

Reviewed on 05/18/2023

#### Trade name: hFrataxin Analyte lyophilyzed

<ul> <li>Inform respective authorities in case of seepage into water course or sewage system.</li> <li>Do not allow to enter sewers/ surface or ground water.</li> <li>Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).</li> <li>Use neutralizing agent.</li> <li>Dispose contaminated material as waste according to section 13.</li> <li>Ensure adequate ventilation.</li> <li>Reference to other sections</li> <li>See Section 7 for information on safe handling.</li> <li>See Section 8 for information on personal protection equipment.</li> <li>See Section 13 for disposal information.</li> <li>Protective Action Criteria for Chemicals</li> </ul>	(Contd. of page 2)
· PAC-1:	
1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	12 mg/m <sup>3</sup>
· PAC-2:	
1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	130 mg/m <sup>3</sup>
· PAC-3:	
1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	790 mg/m <sup>3</sup>

#### 7 Handling and storage

· Handling:

- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Prevent formation of aerosols.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 6.1 D
- · Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

(Contd. on page 4)

<sup>–</sup> US

Printing date 02/20/2024

Reviewed on 05/18/2023

# Trade name: hFrataxin Analyte lyophilyzed

Avoid contact with the eyes.	(Contd. of page 3)
Avoid contact with the eyes and skin	
Respiratory protection:	1 . · 1 A1. T A. ·
· · · ·	e an approved cartridge filter. In case of intensive or longer exposure use
SCBA. Suitable respiratory protective devic	e recommended
• Protection of hands:	e recommended.
Protective gloves	
	neable and resistant to the product/ the substance/ the preparation.
	nsideration of the penetration times, rates of diffusion and the degradation
• Material of gloves The selection of the suitable gloves	does not only depend on the material but also on further marks of quality and
	does not only depend on the material, but also on further marks of quality and acturer. As the product is a preparation of several substances, the resistance
	rulated in advance and has therefore to be checked prior to the application.
· Penetration time of glove material	J. T.
The exact break through time has	to be found out by the manufacturer of the protective gloves and has to be
observed.	
• Eye protection:	
Tightly sealed goggles	
9 Physical and chemical proper	ties
· Information on basic physical and a	chemical properties
• General Information • Appearance:	
Form:	Fluid
Color:	According to product specification
· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value:	N/A
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	1,461 °C (34.661 °F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
· Ignition temperature:	Product is not selfigniting.
• Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
<b>T</b> 7	
Upper:	Not determined.

(Contd. on page 5)

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Reviewed on 05/18/2023

Trade name: hFrataxin Analyte lyophilyzed

		(Contd. of page 4
· Vapor pressure:	Not determined.	
· Density:	Not determined.	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wo	ater): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
VOC content:	0.00 %	
Solids content:	19.6 %	
· Other information	No further relevant information available.	

# 10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

# 11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Strong irritant with the danger of severe eye injury.
- Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:
- The product shows the following dangers according to internally approved calculation methods for preparations: Toxic

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

(Contd. on page 6)

US –

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: hFrataxin Analyte lyophilyzed

(Contd. of page 5)

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

#### 12 Ecological information

- · Toxicity
- *Aquatic toxicity:* No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- Ecotoxical effects: N/A
- Remark: Very toxic for fish
- Other information: N/A
- · Results of PBT and vPvB assessment
- *PBT:* Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- Waste treatment methods
- · Recommendation:

*Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.* 

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number ADR, IMDG, IATA	UN1760
· · ·	011700
UN proper shipping name ADR	1760 CORROSIVE LIQUID, N.O.S. (Proclin-30) ENVIRONMENTALLY HAZARDOUS
IMDG, IATA	CORROSIVE LIQUID, N.O.S. (Proclin-300)
Transport hazard class(es)	
ADR	
Class	8 Corrosive substances

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Reviewed on 05/18/2023

Trade name: hFrataxin Analyte lyophilyzed

	(Contd. of page
Label	8
IMDG, IATA	
8	
Class	8 Corrosive substances
Label	8
Packing group	
ADR, IMDG, IATA	111
Environmental hazards:	
Special marking (ADR):	Symbol (fish and tree)
Special precautions for user	Warning: Corrosive substances
Hazard identification number (Kemler code). EMS Number:	: 80 F-A,S-B
Stowage Category	A = A
Stowage Code	SW2 Clear of living quarters.
Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
Quantity limitations	On passenger aircraft/rail: 5 L
	On cargo aircraft only: 60 L
ADR	
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 50 ml Maximum net quantity per outer packaging: 1000 ml
IMDG	
Limited quantities (LQ)	5L
Excepted quantities $(\tilde{E}Q)$	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1760 CORROSIVE LIQUID, N.O.S. (PROCLIN-300), 8, IL
	ENVIRONMENTALLY HAZARDOUS

# 15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

• Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

9004-54-0 Dextran

ACTIVE (Contd. on page 8)

US –

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: hFrataxin Analyte lyophilyzed

	(Contd. of page 7)
9048-46-8 Bovine Serum Albumin	ACTIVE
7647-14-5 sodium chloride	ACTIVE
1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	ACTIVE
· Hazardous Air Pollutants	
None of the ingredients is listed.	
· Proposition 65	
· Chemicals known to cause cancer:	
None of the ingredients is listed.	
• Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
· Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
· Carcinogenic categories	
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	

TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# **16 Other information**

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

· Contact:

· Date of preparation / last revision 02/20/2024

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

- DOT: US Department of Transportation
- IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit

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Reviewed on 05/18/2023

#### Trade name: hFrataxin Analyte lyophilyzed

(Contd. of page 8)

US

Acute Toxicity - Inhalation 3: Acute toxicity – Category 3 Skin Corrosion 1C: Skin corrosion/irritation – Category 1C Eye Damage 1: Serious eye damage/eye irritation – Category 1 Sensitization - Skin 1: Skin sensitisation – Category 1 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

# revvity

# Safety Data Sheet acc. to OSHA HCS

Printing date 02/20/2024

Reviewed on 05/18/2023

# **1** Identification

- · Product identifier
- · Trade name: Ultra HiBlock Buffer 5X, 2mL
- **Product number:** TRF1011
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Revvity, Inc 549 Albany Street Boston, MA 02118
- Information department: US Technical Support 800-762-4000
- Emergency telephone number:
- If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

# 2 Hazard(s) identification

#### · Classification of the substance or mixture

Acute Toxicity - Inhalation 4	H332 Harmful if inhaled.
Skin Irritation 2	H315 Causes skin irritation.
Eye Irritation 2A	H319 Causes serious eye irritation.
Sensitization - Skin 1	H317 May cause an allergic skin reaction.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1 • Additional information: For	H410 Very toxic to aquatic life with long lasting effects. the wording of the listed H phrases refer to section 16.

#### · Label elements

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



#### · Signal word Warning

- Hazard-determining components of labeling: Proclin-300
   Hazard statements Harmful if inhaled. Causes skin irritation.
- Causes serious eye irritation. May cause an allergic skin reaction.
- Very toxic to aquatic life with long lasting effects.
- · Precautionary statements
- Avoid breathing dust/fume/gas/mist/vapors/spray
- ${\it Wear protective gloves / eye protection / face protection}.$
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

(Contd. on page 2)

<sup>—</sup> ÚS

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Ultra HiBlock Buffer 5X, 2mL

(Contd. of page 1)

1-2.5%

<1%

Call a poison center/doctor if you feel unwell. Dispose of contents/container in accordance with local/regional/national/international regulations. • Classification system:

· NFPA ratings (scale 0 - 4)



# 3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

9002-93-1 Polyethylene glycol octylphenol ether

55965-84-9 Proclin-300

#### 4 First-aid measures

- · Description of first aid measures
- · General information:
- Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• After inhalation:

Supply fresh air and to be sure call for a doctor.

- In case of unconsciousness place patient stably in side position for transportation.
- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:
- Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

(Contd. on page 3)

US

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Ultra HiBlock Buffer 5X, 2mL

	(Contd. of page 2)
Do not allow to enter sewers/ surface or ground water.	(Conta. of page 2)
• Methods and material for containment and cleaning up:	
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).	
Dispose contaminated material as waste according to section 13.	
Ensure adequate ventilation.	
· Reference to other sections	
See Section 7 for information on safe handling.	
See Section 8 for information on personal protection equipment.	
See Section 13 for disposal information.	
· Protective Action Criteria for Chemicals	
· PAC-1:	
None of the ingredients is listed.	
· PAC-2:	
None of the ingredients is listed.	
· PAC-3:	
None of the ingredients is listed.	
7 Handling and storage	

- · Handling:
- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Storage class: 12
- Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see section 7.
- · Control parameters

• *Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at* 

the workplace.

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- Keep away from food and beverages.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.

#### · Respiratory protection:

In case of brief or low exposure use an approved cartridge filter. In case of intensive or longer exposure use SCBA.

(Contd. on page 4)

<sup>–</sup> US

(Contd. of page 3)

## Safety Data Sheet acc. to OSHA HCS

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Ultra HiBlock Buffer 5X, 2mL

Suitable respiratory protective device recommended. • **Protection of hands:** 



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

Information on basic physical and c	hemical properties	
General Information Appearance:		
Form:	Fluid	
Color:	According to product specification	
Odor:	Characteristic	
Odor threshold:	Not determined.	
pH-value:	N/A	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not determined.	

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Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Ultra HiBlock Buffer 5X, 2mL

		(Contd. of page 4)
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/w	pater): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Water:	88.3 %	
VOC content:	0.00 %	
• Other information	No further relevant information available.	

## 10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- *Incompatible materials:* No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

# 11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:

*The product shows the following dangers according to internally approved calculation methods for preparations: Harmful* 

Irritant

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

# 12 Ecological information

· Toxicity

• Aquatic toxicity: No further relevant information available.

(Contd. on page 6)

<sup>–</sup> US

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Ultra HiBlock Buffer 5X, 2mL

· Persistence and degradability No further relevant information available.

· Behavior in environmental systems:

· Bioaccumulative potential No further relevant information available.

• *Mobility in soil* No further relevant information available.

· Ecotoxical effects: N/A

· Remark: Very toxic for fish

• Other information: N/A

· Results of PBT and vPvB assessment

• *PBT:* Not applicable.

· vPvB: Not applicable.

• Other adverse effects No further relevant information available.

## 13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must be specially treated adhering to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

UN-Number ADR, IMDG, IATA	UN3082
UN proper shipping name	
ADR	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. (Proclin-300)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIL N.O.S. (Proclin-300), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUII N.O.S. (Proclin-300)
Transport hazard class(es)	
ADR, IMDG, IATA	
Class	9 Miscellaneous dangerous substances and articles
Label	9
Packing group	
ADR, IMDG, IATA	111
Environmental hazards:	
Marine pollutant:	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
Special marking (1717).	

(Contd. of page 5)

Printing date 02/20/2024

Reviewed on 05/18/2023

Trade name: Ultra HiBlock Buffer 5X, 2mL

	(Contd. of page
· Hazard identification number (Kemler code)	:90
· EMS Number:	F-A,S-F
· Stowage Category	A
Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Excepted quantities (EQ)	Code: El
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
IMDG	
Limited quantities (LQ)	5L
Excepted quantities $(\widetilde{E}Q)$	Code: El
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE
č	LIQUID, N.O.S. (PROCLIN-300), 9, III

# 15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

• Section 355 (extremely hazardous substances):

None of the ingredients is listed.

• Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):			
7732-18-5	Water	ACTIVE	
9000-71-9	casein	ACTIVE	
75277-39-3	HEPES Sodium Salt	ACTIVE	
9002-93-1	Polyethylene glycol octylphenol ether	ACTIVE	
9048-46-8	Bovine Serum Albumin	ACTIVE	
9004-54-0	Dextran	ACTIVE	
· Hazardous Air Pollutants			

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

• Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

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<sup>-</sup> US -

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Trade name: Ultra HiBlock Buffer 5X, 2mL

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• Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

#### · Contact:

• Date of preparation / last revision 02/20/2024

• Abbreviations and acronyms: ADR: Accord relatif au transport internat.

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Toxicity - Inhalation 4: Acute toxicity - Category 4 Skin Irritation 2: Skin corrosion/irritation - Category 2 Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A Sensitization - Skin 1: Skin sensitisation – Category 1 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1